# Specimen Label



### **Specialty Herbicide**

™Trademark of Dow AgroSciences LLC

For control of broadleaf weeds, including many invasive and noxious weeds, on non-cropland areas including industrial sites, rights-of-way (such as roadsides, electric utility and communication transmission lines, pipelines, and railroads), non-irrigation ditch banks, natural areas (such as wildlife management areas, wildlife openings, wildlife habitats, recreation areas, campgrounds, trailheads and trails), and grazed areas in and around these sites.

	GROUP	4	HERBICIDE
--	-------	---	-----------

Active Ingredient:

Triisopropanolammonium salt of 2-pyridine
carboxylic acid, 4-amino-3,6-dichloro- 40.69
Inert Ingredients 59.49
Total 100.09

Acid Equivalent: aminopyralid (2-pyridine carboxylic acid, 4-amino-3,6-dichloro-) - 21.1% - 2 lb/gal



Tilt container to angle as shown and fill head to desired amount – use vertical scale for measuring. Container should be closed.



Hold container up-right and check the amount for accuracy. Add or subtract as needed, using pourback scale as guide.





Remove cap on head and pour into sprayer or other devices. No fluid will pour from the main container. Replace cap for storage in sealed condition.

EPA Reg. No. 62719-537

Keep Out of Reach of Children CAUTION

#### **Precautionary Statements**

#### **Hazard to Humans and Domestic Animals**

**Causes Moderate Eye Irritation** 

Avoid contact with eyes or clothing.

#### **Personal Protective Equipment (PPE)**

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

#### **Environmental Hazards**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies elsewhere on this label. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

#### **Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**Entry Restrictions:** For applications on non-cropland areas, do not enter or allow worker entry into treated areas until sprays have dried.

#### Storage and Disposal

Do not contaminate water, food, feed or fertilizer by storage or disposal. Open dumping is prohibited.

**Pesticide Storage:** If this product is exposed to subfreezing temperatures, the active ingredient may crystallize and settle out of solution. Under these conditions the product should be warmed to at least 40°F and agitated well to dissolve any crystallized active ingredient prior to use.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Disposal (Metal): Do not reuse container.** Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Disposal (Plastic): Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**General:** Consult federal, state or local disposal authorities for approved alternative procedures.

#### **Resistance Management Guidelines**

- Development of plant populations resistant to this herbicide mode of action is usually not a problem on non-cropland sites since these sites receive infrequent pesticide applications.
- Similar looking biotypes of a given weed species occurring in a
  treated area may vary in their susceptibility to a herbicide.
   Application of a herbicide below its labeled rate may allow more
  tolerant weeds to survive and a shift to more tolerant biotypes within
  the treated area.
- Where identified, spreading of resistant weeds to other fields may be prevented by cleaning harvesting and tillage equipment before moving to other areas and by planting weed-free seed.
- Contact your extension specialist, certified crop consultant, or Dow AgroSciences representative for the latest resistance management information.

#### **Non-Cropland Areas**

Milestone<sup>TM</sup> VM specialty herbicide controls broadleaf weeds, including invasive and noxious weeds on non-cropland areas including industrial sites, rights-of-way (including roadsides, electric utility and communication transmission lines, pipelines, and railroads), non-irrigation ditch banks, natural areas (including wildlife management areas, wildlife openings, wildlife habitats, recreation areas, campgrounds, trailheads and trails), and grazed areas in and around these sites without injury to most grasses.

It is permissible to treat non-irrigation ditch banks, seasonally dry wetlands (such as flood plains, deltas, marshes, swamps, or bogs) and transitional areas between upland and lowland sites.

#### **Use Precautions and Restrictions**

- Avoiding Injury to Non-Target Plants: Do not aerially apply Milestone VM within 50 feet of a border downwind (in direction of wind movement), or allow spray drift to come in contact with, any broadleaf crop or other desirable broadleaf plants, including, but not limited to, alfalfa, cotton, dry beans, flowers, grapes, lettuce, potatoes, radishes, soybeans, sugar beets, sunflowers, tobacco, tomatoes or other broadleaf or vegetable crop, fruit trees, ornamental plants, or soil where sensitive crops are growing or will be planted. Avoid application under conditions that may allow spray drift because very small quantities of spray may seriously injure susceptible crops. Follow Precautions for Avoiding Spray Drift and Spray Drift Advisory under General Mixing and Application Instructions to minimize the potential for spray drift.
- Milestone VM is highly active against many broadleaf plant species. Do not use this product on areas where loss of desirable broadleaf plants, including legumes, cannot be tolerated.
- Chemigation: Do not apply this product through any type of irrigation system.
- Do not contaminate water intended for irrigation or domestic purposes. Do not treat inside banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation or domestic purposes.
- Milestone VM should not be applied on residential or commercial lawns. Untreated trees can occasionally be affected by root uptake of herbicide through movement into the soil or by excretion of the product from the roots of nearby treated trees. Do not apply Milestone VM within the root zone of desirable trees unless such injury can be tolerated.
- Crop Rotation: Do not rotate non-cropland to cropland for one year
  following an application of Milestone VM. Do not plant a broadleaf
  crop until an adequately sensitive field bioassay shows that the level
  of aminopyralid present in the soil will not adversely affect that
  broadleaf crop.
- Seeding Legumes or Wildflowers: Do not plant legumes or wildflowers until a soil bioassay has been conducted to determine if residues of Milestone VM remaining in the soil will adversely affect establishment of legumes and wildflowers.
- Field Bioassay Instructions: In a representative section of an area previously treated with this product, plant short test rows of the intended species across the original direction of application in a manner to sample variability in field conditions such as soil texture, soil organic matter, soil pH, rainfall pattern or drainage. The field bioassay can be initiated at any time after application and before the planting of the intended species. Observe the seeded species for symptoms of herbicidal activity, such as poor stand (effect on seed germination), chlorosis (yellowing), necrosis (dead leaves or shoots), or stunting (reduced growth). If herbicidal symptoms do not occur, the intended seeded species may be planted. If herbicidal activity is observed, do not plant the field to the intended seeded species.

#### Milestone VM in Plant Residues or Manure:

- Do not use Milestone VM-treated plant residues, including hay or straw from treated areas, or manure from animals that have grazed forage or eaten hay harvested from treated areas within the previous 3 days as compost or mulch that will be applied to areas where susceptible broadleaf plants may be grown.
- Do not spread manure from animals that have grazed or consumed forage or hay from treated areas within the previous 3 days on land used for growing susceptible broadleaf crops.
- Manure from animals that have grazed forage or hay harvested from Milestone VM-treated areas within the previous 3 days may only be spread on pasture grasses, grass grown for seed, and wheat.
- Do not plant a broadleaf crop in fields treated in the previous year with manure from animals that have grazed forage or hay harvested from Milestone VM-treated areas until an adequately sensitive field bioassay is conducted to determine that the Milestone VM residues in the soil is at a level that is not injurious to the crop to be planted.
- To promote herbicide decomposition, plant residues should be evenly incorporated in the surface soil or burned. Breakdown of Milestone VM in plant residues or manure is more rapid under warm, moist soil conditions and may be accelerated by supplemental irrigation.
- Grazing and Haying Restrictions: There are no restrictions on grazing or hay harvest following application of Milestone VM at labeled rates. Do not transfer grazing animals from areas treated with Milestone VM to areas where sensitive broadleaf crops occur without first allowing 3 days of grazing on an untreated pasture. Otherwise, urine and manure may contain enough Milestone VM to cause injury to broadleaf plants.
- Maximum Application Rate: On non-cropland areas, do not apply more than 7 fl oz (0.11 lb acid equivalent) per acre of Milestone VM per growing season. The total amount of Milestone VM applied broadcast, as a re-treatment, and/or spot treatment per year, must not exceed 7 fl oz per acre. If products containing the same active ingredient are mixed, do not exceed the maximum allowable active ingredient use rate.

#### **Application Methods**

#### (Broadcast Equipment)

Ground Broadcast Application: Apply the labeled rate of Milestone VM as a coarse low-pressure spray. Spray volume should be sufficient to uniformly cover foliage. Increase spray volume to ensure thorough and uniform coverage when target vegetation is tall and/or dense. Higher volumes (greater than 10 gallons per acre) generally provide better coverage and better control, particularly in dense and/or tall foliage canopies situations. To enhance foliage wetting and coverage, an approved non-ionic agricultural surfactant may be added to the spray mixture as recommended by the surfactant manufacturer.

Do not apply this product with mist blower systems that deliver very fine spray droplets. Use of mist blower equipment can reduce weed control and increase spray drift potential.

Aerial Broadcast Application: Apply the labeled rate of Milestone VM as a coarse low-pressure spray. Spray volume should be sufficient to uniformly cover foliage. Increase spray volume to ensure thorough and uniform coverage when target vegetation is tall and/or dense. Spray volumes greater than 2 gallons per acre generally provide better coverage and better control, particularly when the foliage canopy is dense and/or tall. To enhance foliage wetting and coverage, an approved nonionic agricultural surfactant may be added to the spray mixture as recommended by the surfactant manufacturer.

#### (Hand-Held Equipment)

**High-Volume Foliar Application:** High volume foliar treatments may be applied at rates equivalent to broadcast up to a maximum of 7 fl oz per acre per annual growing season. Use sufficient spray volume to thoroughly and uniformly wet foliage and stems. To ensure thorough wetting of high volume treatments, a high quality non-ionic agricultural surfactant may be added to the spray mixture as recommended by the surfactant manufacturer. Repeat treatments may be made, but the total amount of Milestone VM applied must not exceed 7 fl oz per acre per year.

**Spot Application:** Spot treatments may be applied at rates equivalent to broadcast-applied rate of up to a maximum of 7 fl oz per acre per annual growing season. Spray volume should be sufficient to thoroughly and uniformly wet weed foliage. Use of a high quality non-ionic agricultural surfactant may be added to the spray mixture as recommended by the surfactant manufacturer. Repeat treatments may be made, but the total amount of Milestone VM applied must not exceed 7 fl oz per acre per year. To prevent misapplication, spot treatments should be applied with a calibrated boom, boomless spray system, hand-held, or backpack sprayers.

Spot treatments may be applied at an equivalent broadcast rate of up to 0.22 lb acid equivalent (14 fl oz of Milestone VM) per acre per annual growing season; however, not more than 50% of an acre may be treated. Do not apply more than a total of 0.11 lb acid equivalent (7 fl oz per acre of Milestone VM) per annual growing season as a result of broadcast, spot or repeat applications.

Application rates in the table below are based on treating an area of 1000 sq ft. An area of 1000 sq ft is about 10.5 by 10.5 yards in size. Mix the amount of Milestone VM (fl oz or milliliters) corresponding to the desired broadcast rate in 0.5 to 2.5 gallons of water, depending upon the spray volume required to treat 1000 sq ft. A delivery volume of 0.5 to 2.5 gallons per 1000 sq ft is equivalent to 22 to 109 gallons per acre.

Amount of Milestone VM per 1000 sq ft to Equal Broadcast Rate					
Broadcast Rate	Amount of Milestone VM per 1000 sq ft				
(fl oz/acre)	(fl oz)	(Milliliters)			
3	0.069	2			
5	0.115	3.4			
7	0.161	4.8			

**Note:** 1 fluid ounce (fl oz) = 29.6 milliliters (ml) = 2 tablespoons = 6 teaspoons

To calculate the amount of Milestone VM for areas larger than 1000 sq ft: Multiply the table value (fl oz or milliliters) by the area to be treated in "thousands" of square feet. For example, if the area to be treated is 3500 sq ft, multiply the table value by 3.5 (3500 sq ft divided by 1000 sq ft = 3.5).

#### **Broadleaf Weed Control**

#### **Non-Cropland Areas**

Milestone VM may be applied to non-cropland areas as an aerial or ground broadcast treatment, as a spot application, or as a high volume foliar application (see Application Methods section). Milestone VM may be applied alone or in tank mix combinations with labeled rates of other herbicides provided: (1) the tank mix product is labeled for the timing and method of application for the use site to be treated and (2) mixing is not prohibited by the label of the registered tank mixed products. Use as directed in the Directions of Use section of the tank mix partner. Follow Mixing Instructions under the General Mixing and Application Instructions section below.

## Do not use Milestone VM if loss of legumes species or other broadleaf species cannot be tolerated.

During the season of establishment, Milestone VM should be applied only after perennial grasses are well established (have developed a good secondary root system and show good vigor). Most perennial grasses are tolerant to Milestone VM at this stage of development.

Milestone VM may suppress certain established grasses, such as smooth bromegrass (*Bromus inermis*), especially when plants are stressed by adverse environmental conditions. Plants should recover from this transient suppression with the onset of environmental conditions favorable to grass growth and upon release from weed competition.

#### **Broadleaf Weed Management Practices**

Milestone VM may be applied postemergence as a broadcast spray or as a spot application to control broadleaf weeds listed on this label; weeds other than those listed may also be controlled by this herbicide. Postemergence applications should be made before bud stage or early flowering, unless otherwise specified. When a rate range is given, use a higher rate in the range to control weeds at advanced growth stages or under less than favorable growing conditions (such as drought stress). Best weed control results are obtained when spray volume is sufficient to provide uniform coverage of treated plants. For optimum uptake and translocation of the herbicide, avoid mowing, haying, shredding, burning or soil disturbance in treated areas for at least 7 days following application.

Milestone VM also provides preemergence control of germinating seeds or emerging seedlings of broadleaf weeds following application. Weed establishment following an application of Milestone VM will depend upon application rate, season of application, and growing condition effects.

Milestone VM can provide long-term control of weeds. The length of control is dependent upon the application rate, condition and growth stage of target weeds, environmental conditions at and following application, and the density and vigor of competing desirable vegetation. Long-term broadleaf weed control is most effective where grasses and other vegetation is allowed to recover from adverse environmental conditions (such as drought) and compete with susceptible broadleaf weeds.

Milestone VM can be an important component of integrated vegetation management programs designed to renovate or restore desired non-cropland plant communities. To maximize and extend the benefits of weed control provided by Milestone VM, it is important that other vegetation management practices, including mowing fertilization, haying, etc., be used in appropriate sequences and combinations to further alleviate the adverse effects of weeds on desirable plant species and to promote development of desired non-cropland plant communities. Natural resources specialists with federal and state government agencies can provide guidance on best management practices and development of integrated vegetation management programs.

#### **Broadleaf Weeds Controlled**

The following weeds will be controlled with the rates of Milestone VM indicated in the table. For best results, most weeds should be treated when they are actively growing and under conditions favorable for growth. Use a higher rate in the rate range when growing conditions are less than favorable or when weed foliage is tall and dense. Milestone VM also provides preemergence control of germinating seeds and control of emerged seedlings of susceptible broadleaf weeds following application.

**Note:** Numbers in parentheses (-) refer to specific use directions for a particular weeds species.

Common Name	Scientific Name	Rate Range (fl oz/acre)	Life Cycle***	Plant Family
amaranth, spiny	Amaranthus spinosus	4 to 7	annual	Amaranthaceae
broomweed, annual	Amphiachyris dracunculoides	4 to 7	annual	Asteraceae
burdock, common*, **	Arctium minus	4 to 6	biennial	Asteraceae
buttercup, hairy*	Ranunculus sardous	4 to 6	annual	Ranunculaceae
buttercup, tall*, **	Ranunculus acris	4 to 6	perennial	Ranunculaceae
chicory*	Cichorium intybus	4 to 6	perennial	Asteraceae
cinquefoil, sulfur (1)*, **	Potentilla recta	4 to 6	perennial	Rosaceae
cocklebur	Xanthium strumarium	3 to 5	annual	Asteraceae
croton, tropic	Croton glandulosus	3 to 5	annual	Euphorbiaceae
cudweed, purple	Gamochaeta purpurea	4 to 6	annual	Asteraceae
daisy, oxeye (1)*, **	Leucanthemum vulgare	4 to 6	perennial	Asteraceae
dock, curly*	Rumex crispus	4 to 6	perennial	Polygonaceae
evening primrose, cutleaf	Oenothera laciniata	4 to 7	annual	Onagraceae
fiddleneck, common	Amsinckia intermedia	7	annual	Boraginaceae
fireweed	Epilobium angustifolium	5 to 7	perennial	Onagraceae
fleabane, flax-leaf	Conyza bonariensis	4 to 7	annual	Asteraceae
hawkweed, orange (2)*, **	Hieracium aurantiacum	4 to 6	perennial	Asteraceae
hawkweed, yellow (2)*, **	Hieracium caespitosum	4 to 6	perennial	Asteraceae
henbit*	Lamium amplexicaule	4 to 6	annual/biennial	Lamiaceae
horsenettle, Carolina**	Solanum carolinense	4 to 7	perennial	Solanaceae
horseweed	Conyza canadensis	4 to 6	annual	Asteraceae
ironweed, tall	Vernonia gigantea	5 to 7	perennial	Asteraceae
ironweed, western	Vernonia baldwinii	7	perennial	Asteraceae
knapweed, diffuse (3)*, **	Centaurea diffusa	5 to 7	biennial/perennial	Asteraceae
knapweed, Russian (4)*, **	Acroptilon repens	4 to 6	perennial	Asteraceae
knapweed, spotted (3)*, **	Centaurea stoebe	5 to 7	biennial/perennial	Asteraceae
kudzu*, **	Pueraria montana	7	perennial	Fabaceae
lady's thumb*	Polygonum persicaria	3 to 5	annual	Polygonaceae
lambsquarters	Chenopodium album	5 to 7	annual	Chenopodiaceae
marshelder, annual	Iva annua	7	annual	Asteraceae
mayweed, scentless*	Tripleurospermum perforata	4 to 6	annual	Asteraceae
mayweed, stinking*, **	Anthemis cotula	7	annual	Asteraceae
medic, black*	Medicago lupulina	4 to 6	perennial	Fabaceae
ragweed, common**	Ambrosia artemisiifolia	3 to 5	annual	Asteraceae
ragweed, western	Ambrosia psilostachya	4 to 7	perennial	Asteraceae
ragwort, tansy*, **	Senecio jacobaea	4 to 5	perennial	Asteraceae
smartweed, Pennsylvania	Polygonum pensylvanicum	3 to 5	annual	Polygonaceae
sneezeweed, bitter	Helenium amarum	4 to 6	annual	Asteraceae
soda apple, tropical (5)*, **	Solanum viarum	5 to 7	perennial	Solanaceae
sowthistle, perennial*, **	Sonchus arvensis	3 to 5	perennial	Asteraceae
star thistle, yellow (6)*, **	Centaurea solstitialis	3 to 5	annual	Asteraceae
sunflower, common	Helianthus annuus	4 to 6	annual	Asteraceae
teasel, fuller's*	Dipsacus sativus	4 to 7	biennial	Dipsacaceae
thistle, bull (7)*, **	Cirsium vulgare	3 to 5	biennial	Asteraceae
thistle, Canada (8)*, **	Cirsium arvense	5 to 7	perennial	Asteraceae
thistle, musk (7)*, **	Carduus nutans	3 to 5	biennial	Asteraceae
thistle, plumeless (7)*, **	Carduus acanthoides	3 to 5	biennial	Asteraceae
wormwood, absinth*, **	Artemisia absinthium	6 to 7	perennial	Asteraceae
yarrow, common	Achillea millefolium	7	perennial	Asteraceae
yarrow, common	ACTIIIIEA MIIIETOIIUM	/	perenniai	Asteraceae

- \*Invasive plants are introduced species that are indicated to be invasive in the USDA-NRCS, PLANTS Database (http://plants.usda.gov/index.html).
- \*\*Plants designated as noxious weeds in at least one state (PLANTS Database, USDA-NRCS, http://plants.usda.gov/index.html).
- \*\*\*Spot treatment at rates up to 14 fl oz of Milestone VM may be particularly effective against dense patches of perennial broadleaf plants.
- (1) Sulfur cinquefoil or oxeye daisy: Apply Milestone VM at 4 to 6 fl oz per acre to plants in the prebud stage of development.
- (2) Orange or yellow hawkweeds: Apply Milestone VM at 4 to 6 fl oz per acre to plants in the bolting stage of development.
- (3) **Diffuse and spotted knapweeds:** Apply Milestone VM at 5 to 7 fl oz per acre when plants are actively growing with the optimum time of application occurring from rosette to the bolting stages of development or in the fall.
- (4) **Russian knapweed:** Apply Milestone VM at 4 to 6 fl oz per acre to plants in the spring and summer that are in the bud to flowering stage and to dormant plants in the fall.
- (5) **Tropical soda apple:** Apply Milestone VM at 5 to 7 fl oz per acre at any growth stage, but application at flowering will reduce seed production potential.
- (6) Yellow starthistle: Apply Milestone VM at 3 to 5 fl oz per acre to plants at the rosette through bolting growth stages.
- (7) **Bull, musk and plumeless thistles:** Apply Milestone VM at 3 to 5 fl oz per acre in the spring and early summer to rosette or bolting plants or in the fall to seedlings and rosettes. Apply at 4 to 5 fl oz when plants are at the late bolt through early flowering growth stages.
- (8) Canada thistle: Apply Milestone VM at 5 to 7 fl oz per acre either in the spring to plants in the prebud growth stage or in the fall to plant regrowth.

6

#### **General Mixing and Application Instructions**

#### **Mixing Instructions**

**Mixing with Water:** To prepare the spray, add about half the required amount of water in the spray tank. Then, with agitation, add the instructed amount of Milestone VM and other registered tank mix herbicides. Finally, with continued agitation, add the rest of the water and additives such as surfactants or drift control and deposition aids.

**Tank Mixing with Other Herbicides:** Milestone VM at rates of up to 7 fl oz per acre may be mixed with labeled rates of other herbicides registered for application on non-cropland areas to broaden the spectrum of weeds controlled or to improve control of certain weeds. Milestone VM may be applied in tank mix combination with labeled rates of other herbicides provided: (1) the tank mix product is labeled for the timing and method of application for the use site to be treated and (2) mixing is not prohibited by the label of the registered tank mixed products. Use as directed in the Directions for Use section of the tank mix partner.

- For direct injection or other spray equipment where the product formulations will be mixed in undiluted form, special care should be taken to ensure tank mix compatibility.
- Always perform a jar test to ensure the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: Perform a jar test prior to mixing in a spray tank to ensure compatibility of Milestone VM and other pesticides or carriers. Use a clear glass jar with lid and mix ingredients in the same order and proportions as will be used in the spray tank. The mixture is compatible if the materials mix readily when the jar is inverted several times. The mixture should remain stable after standing for 1/2 hour or, if separation occurs, should readily remix if agitated. An incompatible mixture is indicated by separation into distinct layers that do not readily remix when agitated and/or the presence of flakes, precipitates, gels, or heavy oily film in the jar. Use of an appropriate compatibility aid such as Unite or Complex may resolve mix incompatibility. If the mixture is incompatible do not use that tank mix partner in tank mixtures.

Use with Surfactants: For post-emergence applications, a high quality surfactant such as a non-ionic surfactant of at least 80% active ingredient, should be added at 0.25% to 0.5% by volume (unless otherwise specified) to enhance herbicide activity under adverse environmental conditions (such as, high temperature, low relative humidity, drought conditions, dusty plant surfaces) or when weeds are heavily pubescent or more mature.

Mixing with Sprayable Liquid Fertilizer Solutions: Milestone VM is usually compatible with liquid fertilizer solutions. It is anticipated that Milestone VM will not require a compatibility agent for mixing with fertilizers; however, a compatibility test (jar test) should be made prior to mixing. Jar tests are particularly important when a new batch of fertilizer or pesticide is used, when water sources change, or when tank mixture ingredients or concentrations are changed. Compatibility may be determined by mixing the spray components in the desired order and proportions in a clear glass jar before large scale mixing of spray components in the spray tank. Note: The lower the temperature of the liquid fertilizer, the greater the likelihood of mixing problems. Use of a compatibility aid may be required if Milestone VM is mixed with a 2,4-Dcontaining product and liquid fertilizer. Mixing Milestone VM and 2,4-D in N-P or N-P-K liquid fertilizer solutions is more difficult than mixing with straight nitrogen fertilizer and should not be attempted without first conducting a successful compatibility jar test. Agitation in the spray tank must be vigorous to be comparable with jar test agitation. Apply the spray mixture the same day it is prepared while maintaining continuous agitation. Rinse the spray tank thoroughly after use.

**Note:** Foliar-applied liquid fertilizers used as carrier for Milestone VM can cause yellowing of the foliage of forage grasses and other vegetation.

#### **Sprayer Clean-Out Instructions**

Do not use spray equipment used to apply Milestone VM for other applications to land planted to, or to be planted to, susceptible crops or desirable sensitive plants unless it has been determined that all residues of this herbicide has been removed by thorough cleaning of equipment.

Equipment used to apply Milestone VM should be thoroughly cleaned before reusing to apply any other chemicals as follows:

- Rinse and flush application equipment thoroughly after use.
   Dispose of rinse water in non-cropland area away from water supplies.
- Rinse a second time, adding 1 quart of household ammonia or tank cleaning agent for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15 to 20 minutes). Let the solution stand for several hours, preferably overnight.
- 3. Flush the solution out of the spray tank through the boom.
- 4. Rinse the system twice with clean water, recirculating and draining each time.
- Spray nozzles and screens should be removed and cleaned separately.

#### **Precautions for Avoiding Spray Drift**

Avoid application under conditions that may allow spray drift because very small quantities of spray, which may not be visible, may injure susceptible crops. This product should be applied only when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, non-target crops and other plants) is minimal (e.g., when wind is blowing away from the sensitive areas. A drift control aid may be added to the spray solution to further reduce the potential for drift. If a drift control aid is used, follow the use directions and precautions on the manufacturer's label. Do not use a thickening agent with Microfoil, Thru-Valve booms, or other spray delivery systems that cannot accommodate thickened spray solutions.

**Ground Equipment:** With ground equipment spray drift can be lessened by keeping the spray boom as low as possible; by applying 10 gallons or more of spray per acre; by keeping the operating spray pressures at the manufacturer's recommended minimum pressures for the specific nozzle type used (low pressure nozzles are available from spray equipment manufacturers); and by spraying when the wind velocity is low (follow state regulations). Avoid calm conditions which may be conducive to thermal inversions. Direct sprays no higher than the tops of target vegetation and keep spray pressures low enough to provide coarse spray droplets to minimize drift.

**Aerial Application:** Avoid spray drift at the application site. The interaction of many equipment-and weather-related factors determine the potential for spray drift. Users are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

- 1. The distance of the outer most operating nozzles on the boom must not exceed 75% of wingspan or 90% of the rotor diameter.
- Nozzles should be pointed backward parallel with the air stream or not pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the following **Aerial Drift Reduction Advisory**. This information is advisory in nature and does not supersede mandatory label requirements.

#### **Aerial Drift Reduction Advisory**

Information on Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

#### **Controlling Droplet Size:**

 Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

- Pressure Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of Nozzles Use the minimum number of nozzles that will provide uniform coverage.
- Nozzle Orientation Orient nozzles so that the spray is released parallel to the airstream. This produces larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**Boom Length:** For some use patterns, reducing the effective boom length to less than 75% of wingspan or 90% of the rotor diameter may further reduce drift without reducing swath width.

**Application Height:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment:** When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

**Wind:** Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a local, low level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### **Terms and Conditions of Use**

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

#### **Warranty Disclaimer**

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

#### **Inherent Risks of Use**

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

#### **Limitation of Remedies**

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- Refund of purchase price paid by buyer or user for product bought, or
- Replacement of amount of product used.

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

<sup>®™</sup>Trademark of Dow AgroSciences LLC Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

Label Code: D02-880-001

Initial Printing

LOES Number: 010-02121

EPA Accepted: 10-24-05